What I Claim Is:

1. A small brushless motor comprising:

a stator base having a cylindrical portion formed as a bearing housing, said cylindrical portion having an opening;

a bearing for rotatably supporting a rotary shaft of a rotor mounted on said bearing housing;

a stator core mounted in a fixed condition at the outside of said bearing housing;

a magnet comprising a plurality of magnetic poles arranged to face said stator core;

a rotor yoke having said magnet mounted thereon in a fixed condition and having the shaft disposed in the center thereof; and

a molded resin structure having one part disposed over said opening of said cylindrical portion for receiving the thrust of the rotary shaft and another part disposed about said cylindrical portion, said stator core being mounted in a fixed condition on said other part of said molded resin structure.

2. A small brushless motor comprising:

a stator base having a generally flat portion and a cylindrical portion extending from one side of said flat portion, said cylindrical portion being formed as a bearing housing, said cylindrical portion having an opening;

a bearing for rotatably supporting a rotary shaft of a rotor mounted on said bearing housing;

a stator core mounted in a fixed condition at the outside of said bearing housing;

a magnet comprising a plurality of magnetic poles arranged to face said stator core;

a rotor yoke having said magnet mounted thereon in a fixed condition and having the shaft disposed in the center thereof;

a circuit substrate having a circuit juxtaposed to said flat portion on said one side of said flat portion; and

a molded resin structure having one part disposed over said opening of said cylindrical portion for receiving the thrust of the rotary shaft and another part disposed about said

cylindrical portion, said stator core being mounted in a fixed condition on said other part of said molded resin structure.

3. The small brushless motor according to claim 1, wherein said other part of said molded resin structure includes a positioning and locking portion for positioning and locking said stator core on said other part of said molded resin structure.

4. The small brushless motor according to claim 2, wherein said other part of said molded resin structure includes a positioning and locking portion for positioning and locking said circuit substrate and said stator core on said other part of said molded resin structure.

5. The small brushless motor according to claim 1, wherein said stator base is made of metal, said molded resin structure being formed in a mold in which at least a part of said stator base is disposed such that said molded resin structure is molded in-situ about at least a part of said stator base.

6. The small brushless motor according to claim 1, wherein said stator base has a generally flat portion from which said cylindrical portion extends, said flat portion and said cylindrical portion being integrally formed, said stator base having a passage, said molded resin structure having a connecting part disposed in said passage and integrally connecting said one and said other parts of said molded resin structure.

7. The small brushless motor according to claim 6, wherein said passage is in said flat portion of said stator base.

8. The small brushless motor according to claim 1, wherein said stator base has a generally flat portion from which said cylindrical position extends, said flat portion having at least one passage, said one part of said molded resin structure being disposed on one side of said flat portion, said other part of said molded resin structure being disposed on an opposite side of said flat portion, said molded resin structure having a connecting part disposed in a passage in said flat portion, said connecting part integrally connecting said one and said other parts.

9. The small brushless motor according to claim 1, wherein said other part of said molded resin structure includes first and second ledge portions disposed perpendicular to the axis of said rotary shaft, said first ledge portion being disposed on said stator base, said stator core being disposed on said second ledge portion.

10. The small brushless motor according to claim 9, wherein said first ledge portion has an outer diameter greater than the outer diameter of the first ledge portion.

11. The small brushless motor according to claim 10, wherein said other part of said resin molded structure includes a cylindrical mounting section having an outer diameter less than the outer diameter of said first and second ledge portions, said stator core having a central mounting opening

which receives said cylindrical mounting section to thereby mount said stator core on said molded resin structure.

12. The small brushless motor according to claim 1, wherein said opening in said cylindrical portion of said stator base is disposed at one longitudinal end of said cylindrical portion.

13. The small brushless motor according to claim 1, wherein said other part of said molded resin structure includes a cylindrical mounting section, said stator core having a central mounting opening which receives said cylindrical mounting section to thereby mount said stator core on said molded resin structure.

14. The small brushless motor according to claim 2, wherein said other part of said molded resin structure has integral engagement portions, said circuit substrate having engagement sections engaged by said engagement portions, said engagement portions and engagement sections preventing relative rotational movement between said molded resin structure and said circuit substrate.

15. The small brushless motor according to claim 1, wherein said other part of said molded resin structure has integral engagement portions, said stator core having engagement sections engaged by said engagement portions, said engagement portions and engagement sections preventing relative rotational movement between said molded resin structure and said stator core.

16. A small brushless motor comprising:

a stator base having a generally flat portion and a cylindrical portion, said cylindrical portion having an opening;

a bearing for rotatably supporting a rotary shaft of a rotor mounted on said cylindrical portion;

a stator core mounted in a fixed condition outwardly of said cylindrical portion;

a magnet comprising a plurality of magnetic poles arranged to face said stator core;

a rotor yoke having said magnet mounted thereon in a fixed condition and having the shaft disposed in the center thereof; and

a molded resin structure having one part disposed over said opening of said cylindrical portion for receiving the thrust of the rotary shaft and another part disposed about said cylindrical portion, said stator core being mounted in a fixed condition on said other part of said molded resin structure.